Carex macrochaeta C. A. Mey.

large-awned sedge Cyperaceae (Sedge Family)

Status: State Sensitive **Rank:** G5T5S2S3

General Description: Adapted from Hitchcock et al (1969): A perennial sedge with stems that are loosely clustered on a system of short, branching rhizomes. The plants are 4 to 28 in. (10 to 70 cm) tall and lack blade-bearing leaves at the base. The roots are pubescent and covered with a yellowish-brown felt. The leaves are rather few, flat, mostly 1/16 to 1/4 in. (2 to 5 mm) wide and hairless. The staminate (male-flowered) spike is mostly solitary, but sometimes 2 to 3, terminal, ½ to 1¼ in. (1 to 3 cm) long, with black or dark brown, awn-tipped scales. There are 1 to 4 pistillate (female-flowered) spikes and the lowest spike is loose or nodding on a slender, nodding, often elongate peduncle and subtended by a leafy bract which may or may not surpass the inflorescence and which is sheathless or has a short sheath up to about ¼ in. (5 mm) long. The pistillate scales are dark, often with a paler midvein. The scales are usually narrower at the tip than the perigynia, and distinctly awn-tipped with the awn 1/8 to ½ in. (2 mm to 1 cm) long. The perigynium is hairless, narrow, commonly lance-elliptic, light green to dark purplish, 10- to 15-nerved, 1/8 to 1/4 in. (3½ to 4¾ mm) long, beakless or with a very short beak. There are 3 stigmas and the achene is three-angled, 1/16 to 1/8 in. (13/4 to 21/4 mm) long, and loosely enclosed in the lower half of the perigynium.

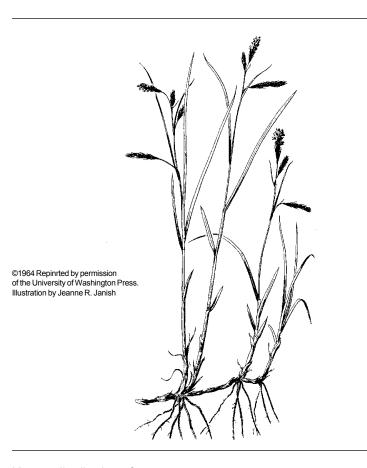
Identification Tips: Carex macrochaeta has pistillate scales that are conspicuously awn-tipped and at least some of the awns in each spike are 1/16 in. (2mm) long or more. The perigynia lack hairs. Closely related Carex species (C. pluriflora, C. limosa, and C. paupercula) are distinguishable because their pistillate scales are awnless or have a very short awn tip (up to 1/16 in. (1½ mm) long) and the perigynia possess both dense and conspicuous hairs. C. macrochaeta can also sometimes be confused with C. spectabilis; however, C. spectabilis has beaks that are longer (¼ mm) and awns that are shorter (½ mm). A technical key is needed for identification.

Phenology: In Washington the species has been found in flower from mid-May to July.

Range: This species is found from the northeast coast of Asia, east through the Aleutian Islands to the Alaska peninsula, and south to Skamania County, Washington. Known extant populations exist in Whatcom and Skamania counties, while historically *C. macrochaeta*

Carex macrochaeta

large-awned sedge



Known distribution of Carex macrochaeta in Washington



- Current (1980+)
- O Historic (older than 1980)

Carex macrochaeta

large-awned sedge





2003 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternative format, call (360) 902-1600 or TTY (360) 902-1125.

Carex macrochaeta

large-awned sedge

was found in Grays Harbor County.

Habitat: The species grows most often in moist or wet, open places, and frequently is found near the coast. In Washington, populations were found near a seepage area close to a slide alder (*Alnus sinuata*) thicket and on basalt cliffs at the base of a waterfall. Observed associates include Oregon sullivantia (*Sullivantia oregana*), white shooting star (*Dodecatheon dentatum*), and bronze bells (*Stenanthium occidentale*).

Ecology: This species grows in seepage areas, around waterfalls, in wet meadows, and along streams and lakes. *C. macrochaeta* is often seen in sedge meadows on the Alaskan coast and is important forage for brown bears and geese.

State Status Comments: This species is disjunct in Washington and is known from less than five populations. However, like many sedges, it may be under-reported.

Inventory Needs: Suitable habitats (particularly streams and waterfalls) throughout the Columbia Gorge and Whatcom County should be systematically surveyed for additional populations. The recent and historical occurrences should also be revisited and thorough information recorded.

Threats and Management Concerns: Definite threats have not been identified for this species. However, the small range of this taxon in Washington and the small number of known occurrences are major concerns. Any disturbance to the immediate habitat may constitute a threat.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1969. Vascular Plants of the Pacific Northwest Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons. University of Washington Press, Seattle, WA. 914 pp.

2003 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternative format, call (360) 902-1600 or TTY (360) 902-1125.